

Epidemiology and Clinicopathology of Breast Cancer in Metro Manila and Rizal Province, Philippines

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BACKGROUND: Breast cancer is the leading female cancer site in the Philippines. There have been several research projects on breast cancer, in collaboration with organizations such as the International Agency for Research on Cancer (IARC), German Cancer Research Center (GCRC), Finnish Cancer Registry (FCR), International Breast Cancer Research Foundation (IBCRF), Philippine Cancer Society Inc., University of the Philippines Manila (UPM), Philippine College of Surgeons (PCS), and the Philippine Department of Health (DoH).

METHODS: Publications, both local and international, of the results of completed projects were reviewed and will be the subject of the presentation.

RESULTS: Breast cancer incidence in the Philippines is among the highest in Asia. Age-standardized incidence rates (ASRs) in Metro Manila and Rizal Province derived from the Philippine Cancer Society-Manila Cancer Registry (PCS-MCR) and the Department of Health-Rizal Cancer Registry (DOH-RCR) show that ASRs had increased from 1980 to 2002, and were significantly higher in 7 cities in Metro Manila and significantly lower in 14 cities/municipalities, mostly in Rizal Province. Clinical Stage (TNM American Joint Commission on Cancer) had not changed from 1993 to 2002 among incident cases, the average distributions being: I=5%, IIA=20%, IIB=18%, IIIA=9%, IIIB=10%, IV=11%, Unknown=27%. The IARC attempted to run a randomized screening trial in 1995-1997 in the region based on clinical breast examination by trained nurses and midwives. Unfortunately, even after home visits by a team equipped to perform needle biopsy, only 35% of screen-positive cases eventually had a diagnostic test. The authors suggested that lack of trust in the health system and one's chances to be cured could have discouraged screen-positive cases from proceeding to diagnosis. The estimated prevalence of BRCA mutations among unselected patients at the Philippine General Hospital (PGH) in 1998 was 5.1%, with a prevalence of 4.1% for BRCA2 mutations alone. There is a continuing effort aimed at improving immunohistochemistry (IHC) hormone receptor testing at the PGH, particularly on early fixation in buffered formalin. It was observed that hormone receptor-positive proportions tended to be higher in core needle biopsy specimens (72%) compared to mastectomy specimens (65%). During the years 1991, 1994 and 1997, 97% of incident cases of early breast cancer underwent modified radical mastectomy, 18% had postoperative radiotherapy, 51% had adjuvant hormone treatment, and 47% received adjuvant chemotherapy. Survival of incident cases in 1993-2002 was compared to that of Filipino-Americans and Caucasians in the U.S.A. National Cancer Institute Surveillance Epidemiology and End Results (SEER 13) database. The age-adjusted relative survival, using period analysis, of Metro Manila residents, Filipino-Americans and Caucasians were 58.6%, 89.6% and 88.3% respectively. The differences in survival were

mainly attributed to the larger proportion of patients in earlier stages among the SEER populations, as compared to Metro Manila residents.

RECOMMENDATIONS: The Philippine DoH can assist population-based cancer registration in the Philippines by providing financial, regulatory and coordinative support to the two registries and some struggling registries in key locations. The Philippine Cancer Control program could rethink and refocus its activities towards those that are more appropriate, achievable and sustainable. There is already enough indirect evidence that clinical breast examination and self-examination can increase survival, and future intervention studies should see if a combination of an appropriate message that is adequately delivered, in combination with sufficient public funding of necessary services for the needy, could work. The Philippine College of Surgeons should take the lead in a national effort to improve IHC hormone receptor assays.